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PATENT

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BOARD OF PATENT APPEALS AND INTERFERENCES

APPELLANT: Theodore W. Meyers)

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APPLICATION NO.: 09/652,927)

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ART UNIT: 3677)
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CONFIRMATION NO.: 4367)

APPEAL BRIEF

Mail Stop Appeal Brief
Commissioner for Patents
P.O. Box 1450
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(1) REAL PARTY IN INTEREST

The real party in interest in the application on appeal, United States Patent Application No. 09/652,927, is the assignee, Tuf-Tite, Inc., an Illinois corporation, located at 550 Capitol Drive, Lake Zurich, Illinois, 60047.

(2) NO RELATED APPEALS AND INTERFERENCES

To the best of the knowledge of the Applicant, the Applicant's legal representatives, and the assignee, there are no other appeals or interferences which will directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

(3) STATUS OF CLAIMS

Claims 1-6 and 15-23 are pending. Claims 7-14 and 24 are cancelled. Claims 25-27 were withdrawn from consideration in an election requirement. Claims 1-6 and 15-23 are the claims appealed.

(4) STATUS OF AMENDMENTS

There have not been any amendments filed subsequent to the final rejection. All previous amendments have been entered and are reflected in the pending claims.

(5) SUMMARY OF THE INVENTION

In septic tanks and other on-site waste disposal systems, pipe couplings, known in the art as "tees," are used to direct and control the flow of sewage into, or filtered effluent out of, the tank of the disposal system. P. 1, lines 18-21. There has been a recent trend to use plastic tees in the place of concrete baffles conventionally used at the inlet and outlet of septic and other on-site waste systems. P. 1, lines 28-30. When used at the inlet or outlet of a septic tank, a tee may be referred to as a tee baffle.

The tee baffle can have a right-angle shape, or can be in the form of a sanitary tee-type baffle, in which case it has an arching, or "sweep" design portion at the inlet/outlet port. Typically, installers of septic tanks and other on-site waste disposal systems employ standard (i.e., right-angled) tees or sweep tees manufactured primarily for use in plumbing applications, such as for pipe joints or couplings. As a result, such standard tees and sweep tees are not universally adequate for serving as the housing for an effluent filter inside the septic tank. P. 2, lines 10-20. Since conventional pipe tees are formed as relatively short-length plumbing couplings, they are not of sufficient length to encase or house any of the currently available effluent filters. P. 4, lines 5-8.

Most known commercial effluent filters require a generally cylindrical housing extending to cover much, if not all, of the extended length of the effluent filter. This is

required in order to provide regions for filtered effluent to eventually reach the outlet port of the tee, and thereby exit the tank portion of the system, all without again mixing with unfiltered sewage. P. 4, lines 8-17.

Generally cylindrical filter housings for effluent filters are usually provided by way of a length of PVC pipe cut down to fit one end of the available plumbing tees, and of sufficient length to cover the sealing gasket used with many of the known single-pass effluent filters. The gasket of the effluent filter provides a sealing membrane between the effluent filter and the inner wall of the specially cut length of PVC pipe to substantially isolate a region therebetween to receive filtered effluent. P. 4, lines 18-25.

Health and sanitary-related codes and regulations in some jurisdictions require the elongated portion of pipe tees used in septic tanks to extend lower, i.e. deeper into the region of effluent in the septic tank known as the "clear zone," than is minimally necessary for the elongated portion of the tee to cover the effluent filter. P. 5, lines 5-11.

The sanitary tee baffle for which patent protection is sought is of reduced wall thickness over most of its length, as compared with conventional schedule 40 pipes and pipe tees, which generally have a uniform wall thickness of about 0.250". The reduced wall thickness, on the order of between 0.075" and 0.100", and in one example about 0.090", provides a substantial savings in material and molding expense as compared to conventional schedule 40 pipes and pipe tees. P. 9, lines 2-9.

The sanitary tee can also be provided with one or more integral annular strengthening ribs on the outer wall to provide reinforcement to the otherwise thin-walled thicknesses. The lower region of the tee includes a cylindrical portion that tapers inwardly down to a smaller diameter lowermost end of the tee. This lowermost end advantageously can be used to couple with the bell end of a length of additional pipe to further lengthen the sanitary tee, if needed. This is advantageous because the thinner-walled pipe achieves what conventionally

required heavier duty Schedule 40 pipe. The inner wall of the lowermost end also provides an improved seal surface for the annular gaskets provided on many commercial single-pass type effluent filters. P. 10, lines 4-17.

A sanitary tee 10 as disclosed in the Applicant's specification is used at an outlet opening 12 of a septic tank 14, and can serve as a housing for an effluent filter 16. Before exiting the septic tank 14 through a drainage pipe 20, effluent passes into a lowermost end 22 of the sanitary tee 10. The effluent then is filtered through the effluent filter 16 substantially occupying the hollow space in an elongated main body portion 24 of the sanitary tee 10. The cap 26 of the effluent filter 16 rests on a tapered rim 28, or inner slanted shoulder, at the intersection of the elongated main body portion 24 and a bell-shaped upper end or hub 30 of the sanitary tee 10. P. 12, line 26 - p. 13, line 11.

The hub 30 is preferably in the form of a ring that is open at the top to allow for access to a handle 32 of the effluent filter 16, provided on a top side of the cap 26. The sanitary tee further includes an arching sweep portion 34 that defines an opening in communication with the opening in the elongated main body portion 24, to direct filtered effluent out through a ring-shaped outlet port 36. When used at the inlet of a septic tank, the sweep portion 34 instead directs sewage down into the elongated main body portion 24, and toward the bottom of the septic tank. The drainage pipe 20 is received in the inlet/outlet port 36 of the sanitary tee 10 to drain filtered effluent through the outlet opening 12 of the septic tank 14. P. 13, lines 12-24.

The hub 30 can be extended by simply frictionally fitting a smaller diameter pipe segment, such as SDR 35 (ASTM 3034) 4" pipe or ASTM 2729 4" pipe, of sufficient length to meet state or municipal sanitary regulations, or local customs or standards. Alternatively, a bell end or coupling can be secured, e.g. glued, over the outside of hub 30, and a suitable riser pipe would fit into such a coupling. The coupling would have a sufficient inner

diameter to accommodate the outer diameter of hub 30, and preferably, the riser pipe added to the coupling has an inner diameter at least as wide as the inner diameter of the hub 30, whereby there is sufficient clearance provided for access to, and changing of, effluent filters

16. P. 14, lines 1-14.

While schedule 40 pipe is typically used for drainage at the inlet and outlet ports of septic tanks, it is recognized that it may be desired to use thinner-walled pipe than schedule 40 pipes, such as SDR 35 pipe or ASTM 2729 pipe. Thus, to accommodate such thinner walled or other varying outside diameters of such different sized pipes, a cylindrical reducer bushing 64 can be used in the ring-shaped inlet/outlet port 36 of the sanitary tee 10 in order to securely accommodate such smaller pipes. The reducer bushing 64 can be secured by means of a plastic weld sealant. On the other hand, the reducer bushing 64 is not used when the drainage pipe 20 comprises a larger diameter, heavier duty so-called schedule 40 pipe. P. 17, line 25 - p. 18, line 13.

The Applicant's sanitary tee 10 advantageously includes the integral longitudinal extension, achieved by the elongated main body portion 24, which avoids having to cut a small length of separate pipe (and typically then wastefully dispose of the unused remainder of pipe) for the vertical portion of a conventional tee. The sanitary tee 10 also reduces the need for extra molding material by utilizing reinforced thinner walls, i.e. having a wall thickness significantly less than schedule 40 pipe along most of its length. P. 18, lines 18-27.

The Applicant's sanitary tee 10 has a hub at its inlet or outlet port, with an internal diameter that is equal to the inner diameter of a schedule 40 sized hub. The sanitary tee's walls can be reinforced by one or more integral annular ribs 60, 62 provided about the exterior of the tee baffle, and one or more longitudinal rib members 66 that extend along each of the two longitudinal seams, all on the sanitary tee's exterior surfaces. As such, the exterior of the sanitary tee 10 would be interrupted with these horizontal and vertical ribs.

Nevertheless, the interior walls of the sanitary tee 10 are substantially smooth. The smoothness facilitates ease of insertion and/or removal of the effluent filter 16, 18, and avoids premature plugging of the pipe tee, as may otherwise be caused by the collection of grease, fats, oils, hair, lint and other floatables at rough surfaces or flash in a conventional pipe tee.

Another advantage of the annular ribs 60, 62 and the longitudinal ribs 66 is that they not only can provide the beneficial reinforcing function discussed above, but they also can provide a molded-in runner system that, during injection molding of the tee baffle 10, helps distribute plastic along the tee baffle. P. 19, lines 1-23.

The one-piece tee baffle 110 may be in the form of a sanitary tee, having an arching sweep portion 134 which terminates in an inlet/outlet opening 136. This inlet/outlet opening 136 can receive a reducer bushing 164. Since the tee baffle 110 is formed as a single part, there are no seams. However, because of the thin-walled construction, on the order of between 0.075" and 0.100", or in one example, about 0.090", longitudinal ribs 147 can be provided along the vertical axis of the tee baffle 110. At a lower end of the elongated main body portion 124, in one example, a plurality of annular strengthening ribs 180 are provided in the vicinity of a hub-receiving end 122. Advantageously, the one piece tee baffle 110 maintains a thin-wall profile over most of its area, substantially reducing manufacturing costs as compared with conventional prior art tees, while still exhibiting sufficient rigidity and strength, by virtue of the vertical ribs and annular ribs 160, 180. P. 25, lines 1-18.

(6) ISSUES ON APPEAL

1. Whether claims 1, 4, 6, and 19 are unpatentable under 35 U.S.C. § 103 over Zoeller, U.S. Patent No. 6,136,190 ("Zoeller") in view of Nurse, U.S. Patent No. 5,580,453 ("Nurse") and further in view of Morrison, U.S. Patent No. 901,545 ("Morrison")?

2. Whether claims 2, 3, 5, 15-18, and 20-23 are unpatentable under 35 U.S.C.

§ 103 over Zoeller in view of Nurse, in view of Morrison, and further in view of Ramm, U.S. Patent No. 3,633,943 ("Ramm")?

3. Whether the Examiner failed to give adequate consideration and weight to the affidavits under 37 CFR § 1.132 filed December 2, 2002 and August 7, 2003?

(7) GROUPING OF CLAIMS

Claims 1, 4, 6, and 19 stand or fall together, and claims 2, 3, 5, 15-18, and 20-23 stand or fall together.

(8) ARGUMENT

Introduction

References may not be combined to support an obviousness rejection without motivation or suggestion to combine them in the proposed manner, and when objective evidence of secondary considerations of non-obviousness is presented, it must be considered. These fundamental doctrines have been cast aside in the examination of the application on appeal. Claims 1, 4, 6, and 19 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Zoeller in view of Nurse and further in view of Morrison. Claims 2, 3, 5, 15-18, and 20-23 were separately rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Zoeller, in view of Nurse, in view of Morrison, and further in view of Ramm.

The rejection of claims 1, 4, 6, and 19, and the rejection of claims 2, 3, 5, 15-18, and 20-23, should be overturned because a prima facie case of obviousness under 35 U.S.C. § 103 has not been established. As to the rejection of claims 1, 4, 6, and 19, based on a proposed combination of Zoeller with Nurse and Morrison, the final Office Action admits that Zoeller differs from the Applicant's claims because Zoeller does not disclose that the cylindrical main body portion is elongated and that the inlet/outlet hub receives a pipe of a first outer

diameter, and is adaptable to receive a pipe of a second outer diameter by the use of a reducer. Yet the final Office Action indicates, in a conclusory fashion and without pointing to any evidentiary support, that:

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have an elongated cylindrical main body portion, as taught by Nurse ('453), and a device that helps to receive a first or a second outer diameter into the inlet/outlet hub, as taught by Morrison, into a tee as described by Zoeller, in order to adapt a bigger and larger filter and to adapt different pipes with different outer diameters.

Paper No. 25, at 3. As there is no explanation as to why the teachings of Nurse and Morrison would have led one of ordinary skill in the art to modify Zoeller by *both* Nurse and Morrison, the statement in the final Office Action is insufficient to establish a *prima facie* case of obviousness. *In re Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992).

The rejection of claims 2, 3, 5, 15-18, and 20-23 is based on a proposed combination of Zoeller with Nurse and Morrison, and further in view of Ramm. This proposed combination is also unsupported by any motivation to combine the references in the proposed manner documented in the references themselves. Any motivation proffered in the final Office Action is, with respect, either contrived and specious, or is based on the Applicant's own disclosure-- thus amounting to impermissible hindsight reconstruction.

Even if a minimum threshold *prima facie* case of obviousness had been established, the Applicant's overwhelming objective evidence of secondary considerations of non-obviousness, as presented in two affidavits under 37 C.F.R. § 1.132, is more than sufficient to demonstrate the non-obviousness of the subject matter recited in claims 1, 15 and 21, and in the claims depending therefrom. The cursory dismissal of these two affidavits as "insufficient to overcome the current prior art rejection of claims 1-6 and 15-23" (Paper No. 25, final Office Action, at 7) demonstrates a failure during examination to give due consideration and weight to the affidavits, and the objective evidence presented therein. For

these reasons, the rejections set forth in the final Office Action should be reversed, and the claims of the application should be passed to issuance.

**I. A Prima Facie Case of Obviousness of Claims
1, 4, 6, and 13 Has Not Been Established**

The procedural framework for obviousness rejections is discussed in numerous decisions of the Federal Circuit:

An obviousness determination is based on underlying factual inquiries including: (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of nonobviousness.

In re Dembiczak, 50 USPQ2d 1614, 1616 (Fed. Cir. 1999) (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966)).

The examiner bears the burden of establishing a prima facie case of obviousness. Only if this burden is met does the burden of coming forward with rebuttal argument or evidence shift to the applicant. When the references cited by the examiner fail to establish a prima facie case of obviousness, the rejection is improper and will be overturned.

In re Deuel, 34 USPQ2d 1210, 1214 (Fed. Cir. 1995), citations omitted. If a prima facie case of obviousness has not been established, the rejection of claims 1, 4, 6, and 13 cannot stand.

The final Office Action admits that Zoeller fails to disclose that the cylindrical main body portion is elongated. (Paper No. 25, at 3). The final Office Action additionally concedes that Zoeller fails to disclose that the inlet/outlet hub is adaptable to receive a pipe of a first outer diameter or of a second outer diameter. *Id.* As to dependent claim 6¹, the final Office Action further concedes that Zoeller fails to disclose the use of a reducer to allow the inlet/outlet hub to receive a pipe of a second outer diameter. *Id.*

¹ Independent claim 1 does not specifically recite the use of a reducer, and thus is not limited thereto.

A. “Adaptable” Language in Main Body of Claim 1
is a Limitation of Patentable Significance

The final Office Action indicates the “adaptable” language in claim 1 is considered to be comparable to the “adapted to” language considered by the Court of Customs and Patent Appeals in *In re Hutchison*, 69 USPQ 138 (C.C.P.A. 1946). This comparison was relied upon in the final Office Action in the present application as the grounds to conclude the “adaptable” language “does not constitute a limitation in any patentable sense.” Paper No. 25, at 6. However, the claim language at issue in *In re Hutchison* was set forth only in the preamble, or, as the court in that case wrote, “the introductory clause,” of the claim. 69 USPQ 138, 141. With a few exceptions not relevant here, preamble language generally does not constitute limiting language. *Catalina Marketing International Inc. v. Coolsavings.com Inc.*, 62 USPQ2d 1781, 1785 (Fed. Cir. 2002) (citing *IMS Tech., Inc. v. Haas Automation, Inc.*, 54 USPQ2d 1129, 1136-37 (Fed. Cir. 2000); *Rowe v. Dror*, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997)). Consistent with this general rule, the Court of Customs and Patent Appeals in *Hutchison* did not consider the “adapted to” language to be limiting.

By contrast, the language “said inlet/outlet hub . . . being adaptable to receive a pipe of a second outer diameter” is in the *main body* of Applicant’s claim 1, rather than in the preamble, and thus does indeed amount to a limitation. This limitation, including the term “adaptable,” must be given patentable weight.

B. An Obviousness Rejection Under 35 U.S.C. §103(a)
Based on a Combination of References Cannot be
Sustained Without a Suggestion or Motivation
to Combine the References

1. The Contrived Motivation to Modify the Zoeller Reference
According to the Nurse and Morrison References is Specious

An essential cornerstone to a *prima facie* case of obviousness to support a rejection under 35 U.S.C. § 103 based on a combination of multiple prior art references is that there be some motivation or suggestion within the prior art to combine the references as proposed.

See, e.g., Riverwood International Corp. v. Mead Corp., 54 USPQ2d 1763, 1765 (Fed. Cir. 2000) (“when obviousness is based on particular prior art references, there must be a showing of a suggestion or motivation to combine the teachings of those references.”)(citing *In re Fine*, 5 USPQ2d 1596, 1598-99 (Fed. Cir. 1988)). According to the final Office Action, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Zoeller according to Nurse and Morrison to achieve a tee as described by Zoeller, but having an elongated cylindrical main body portion, and that is adaptable to receive a pipe of a first or a second outer diameter into the inlet/outlet hub. The proffered motivation to combine the three references in that manner is “in order to adapt a bigger and larger filter and to adapt different pipes with different outer diameters.” (Paper No. 25, at 3). Other than that base assertion, virtually no support for that proposed motivation-to-combine was proffered in any of the Office Actions.

As discussed on page 4 of the specification, most known commercial effluent filters require a generally cylindrical housing extending to cover much, if not all, of the extended length of the effluent filter, so that filtered effluent may reach the outlet port of the tee, and exit the tank portion of the system, but without again mixing with unfiltered sewage. This need to cover the extended length of conventional effluent filters was not adequately met by conventional pipe tees alone. Conventional pipe tees were formed as relatively short-length plumbing couplings. Thus, the problem is not that the filters have gotten bigger. Therefore, there is no need to “adapt a bigger and larger filter” as speciously argued in the final Office Action. Rather, the problem was the widespread use of conventional plumbing tees, of which the Zoeller reference is typical, that are inherently inadequate in length to accommodate the existing elongated filters without the additional use of a pipe extension, at increased cost, labor, and waste of unused cut-off pipe.

Neither the Zoeller, Nurse, nor Morrison references disclose the “motivation” proffered in the final Office Action of a need to adapt a bigger and larger filter. Furthermore, because the proposed motivation to combine the Zoeller, Nurse, and Morrison references was not a problem the Applicant was trying to solve, was also not a problem identified in any of the Zoeller, Nurse, or Morrison references, and is not even a problem facing the industry, it cannot be the case that this was a motivation coming from either the nature of the problem to be solved or from the knowledge of those of ordinary skill in the art. *See, e.g., Akamai Technologies Inc. v. Cable & Wireless Internet Services Inc.*, 68 USPQ2d 1186 (Fed. Cir. 2003) (listing as possible sources of a suggestion to combine prior art references the nature of the problem to be solved, the teachings of the pertinent references, and the ordinary knowledge of those skilled in the art that certain references are of special importance in a particular field).

Without an objective, “real world” suggestion or motivation to combine Zoeller, Nurse, and Morrison as proposed, no *prima facie* case of obviousness based on their combination can be established. *See In re Fritch*, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (“[The Examiner] can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.” (quoting *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988))). There has been no objective showing in any of the Office Actions of a suggestion or motivation to combine Zoeller, Nurse, and Morrison in the proposed manner.

2. Ignoring the Requirement of a Suggestion or Motivation to Combine References to Support an Obviousness Rejection is Error

The Applicant's arguments and affidavit testimony concerning the lack of motivation to combine the Zoeller, Nurse and Morrison references is summarily dismissed in the final Office Action with the statement that “Zoeller, as modified by Nurse discloses the invention

as claimed. The fact that the main body is elongated is considered as a change in size or shape that will not affect the connection.” Paper No. 25, at 5-6. Notably, it is not the case that Zoeller as modified by Nurse discloses the claimed invention, because claim 1 recites “said inlet/outlet hub having a diameter sized so as to receive a pipe of a first outer diameter and being adaptable to receive a pipe of a second outer diameter.” As discussed in Part IA, *supra*, this “adaptable” language is not in the preamble of independent claim 1, but rather, is in the main body, and is indeed a limitation with patentable significance.

Nonetheless, even if it were accurate that the proposed modification of one reference according to another reference disclosed the invention as claimed, the implication that there is no need for a showing of a motivation to combine references to support a rejection under 35 U.S.C. § 103(a) in such an instance is an erroneous application of the statutory and procedural requirements for obviousness rejections. This error is compounded by the failure to properly consider the objective evidence of secondary considerations of non-obviousness submitted through the Applicant's two affidavits under 37 C.F.R. §1.132, as discussed *infra*. This amounts to an improper heightening of the applicable standard to rebut an obviousness rejection by converting obviousness from a rebuttable presumption into an irrefutable, or conclusive presumption, a practice which this Board expressly condemned in *Ex parte Ohsaka*, 2 USPQ2d 1460, 1462 (Bd.Pat.App.&Int. 1987) (reversing obviousness rejections, reasoning: “The flaw with this approach is that the examiner has, in practical effect, converted a rebuttable presumption into a conclusive or irrebuttal presumption of obviousness. The examiner incorrectly reverts to his initial conclusion of obviousness, finding the declaration evidence unconvincing ‘for the reasons given in support of the [initial] conclusion.’”).

The final Office Action indicated that the change in shape to an elongated cylindrical main body portion is “a design consideration within the level of skill of one skilled in the

art." Paper No. 25, at 3. However, as discussed below, aside from the Applicant's disclosure, there is no showing as to why one of ordinary skill in the art would have resorted to such a design consideration for use in the combination of elements as recited in the claims. Such a showing has not been made in combining the cited references.

3. The Proffered Motivation to Further Modify the Proposed Combination of Zoeller, Nurse and Morrison is Based on the Applicant's Own Disclosure

The specification of the application presently on appeal describes at page 18 that in order to accommodate thinner-walled pipes, besides Schedule-40 sized pipe, a cylindrical reducer bushing can be used in the ring-shaped inlet/outlet port 36 of the sanitary tee 10 in order to securely accommodate such smaller pipes. None of the Zoeller, Nurse, and Morrison references specifically recite adapting the inlet/outlet port to receive different pipes of different outer diameters as a motivation for those references to be combined with other references. It is respectfully submitted that the proposed motivation was impermissibly derived from the Applicant's own specification. Nowhere in any of the Office Actions has there been a citation to objective support for a suggestion or motivation to combine the references in the proposed manner.

Morrison is the reference relied upon to show knowledge in the art of a tee adapted to receive a pipe of a first or second outer diameter (Paper No. 25, at 3, 6). Even Morrison does not disclose or suggest a tee adapted to receive a pipe of two different diameters. Rather, Morrison teaches slip-fit pipe fittings in sanitary plumbing tees connected in series, in which packing, such as oakum and lead for caulking, is applied around the exterior of one tee as placed in the hub of another tee. The Applicant's August 6, 2003 Supplemental Affidavit distinguished Morrison as follows:

6. With respect, I disagree with the statement in the Office Action that "Morrison teaches that it is known in the art to have a tee adapted to receive a pipe of a first or second outer diameter (by using a reducer as illustrated in Figure 8)." Morrison does not teach the use of a reducer. Rather, in Figure 8,

Morrison shows a ring (a⁶) inserted in the hub to operate as a stop for the end of a succeeding tee, i.e. to avoid the presence of a slip joint, sealed by oakum and lead, within a pipe tee. **There is no teaching in Morrison of a pipe received inwardly of the ring (a⁶).** The vertical lines in the drawing of Figure 8 represent the interior of the ring, not part of a pipe. Since the ring is used as a stop, it would be directly contrary to the purpose of the ring (a⁶) in Morrison to have a pipe received inwardly of the ring (a⁶). A pipe received within the ring (a⁶) would have to be sealed within the ring with some type of caulk, such as the oakum and lead described in the specification of Morrison, thus introducing a slip joint, including caulk, into the soil pipe. Yet, this is exactly what Morrison expressly indicates is sought to be avoided by providing the ring (a⁶) in the first place.

Supplemental Affidavit of Theodore W. Meyers Under 37 C.F.R. §1.132, ¶ 6 (emphasis added). Inasmuch as Morrison does not disclose a motivation to make an inlet/outlet port adaptable, by using a reducer or otherwise, to accept a pipe of a first diameter or a second diameter, but rather, Morrison teaches away from such a change, the motivation must have been impermissibly gleaned from the Applicant's disclosure. This is hindsight reasoning, and is impermissible. *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 220 USPQ 303, 312-13 (Fed.Cir.1983) ("To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.") *See also In re Kotzab*, 55 USPQ2d 1313, 1317-18 (Fed. Cir. 2000) ("[A] rejection cannot be predicated on the mere identification ... of individual components of claimed limitations. Rather, particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed.").

C. The Rejection of Claims 1, 4, 6, and 19 Must Be Reversed

Inasmuch as there has been no objective showing of suggestion or motivation to combine the Zoeller, Nurse and Morrison references in the proposed manner, a *prima facie* case of obviousness has not, and cannot, be established. The only proffered motivations to combine the references are either specious, or are impermissibly culled from the Applicant's

disclosure. The rejection of claims 1, 4, 6, and 19 is therefore improper and should be reversed.

II. A Prima Facie Case of Obviousness of Claims 2, 3, 5, 15-18, and 20-23 Has Not Been Established

The errors in the rejection of claims 1, 4, 6, and 19, addressed in Part I, *supra*, are carried forward in the final Office Action in the rejection of claims 2, 3, 5, 15-18, and 20-23, because the same combination of Zoeller in view of Nurse and Morrison is applied in the rejection. Moreover, the rejection of claims 2, 3, 5, 15-18, and 20-23 adds that it would also have been obvious to a person of ordinary skill in the art to further modify the proposed combination of Zoeller in view of Nurse and Morrison according to the teachings of the Ramm reference.

A. An Unsupported Combination of References Cannot Be Further Combined With Additional References Without a Suggestion or Motivation to Combine to Establish a Prima Facie Case of Obviousness Under 35 U.S.C. § 103

The final Office Action concedes that Zoeller, as modified by Nurse and Morrison, fails to disclose that the tee includes a first and second rib extending longitudinally along the elongated main body (as recited in claim 21), seams which coextend with the first and second ribs (as recited in claim 3), and that the main body portion has a wall thickness between 0.075" and 0.100" (as recited in claim 15). Paper No. 25, at 4. Ramm is then relied upon as teaching use of reinforced ribs along the main body portion, and having seams coextending with the first and second ribs. Again in a conclusory fashion, the final Office Action states:

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a main body with reinforcing ribs, as taught [by] Ramm, into a tee as described by Zoeller, as modified by Nurse ('453) and Morrison, in order to reinforce to give more strength to the main body portion.

Paper No. 25, at 4-5. This proffered motivation fails to establish a prima facie case of obviousness. *In re Fritch*, 62 USPQ2d 1781, 1785 (Fed. Cir. 2002). Even if it were the case

that the Ramm, Zoeller, Nurse, and Morrison references, respectively, disclose what they are each relied upon in the final Office Action as disclosing, prior art references merely in combination do not establish obviousness unless something in the prior art references suggests the advantage to be derived from combining their teachings. *In re Sernaker*, 217 USPQ 1, 6-7 (Fed. Cir. 1983). The final Office Action fails to point to anything in these references suggesting the desirability of, advantages that might be achieved by, or any other reason found in the prior art for making, the proposed combination. The further combination of Ramm with the earlier unsupported combination of Zoeller, Morrison, and Nurse is erroneous and improper.

**B. The Contrived Motivation to Combine the References
Is Based Solely on the Applicant's Disclosure**

Nurse is relied upon in the final Office Action for teaching that an inner diameter of the main body portion may be 4, 6, or 8 inches, and Official Notice appears to be taken that “if someone is designing a pipe system, you will know that for a pipe (PVC or the like) with an inner diameter of 4 inches, the wall thickness is about .237 inches.” It is respectfully submitted that without an explanation as to why the teachings of the Ramm reference would have led one of ordinary skill in the art to modify the already-suspect combination of Zoeller as modified by Nurse and Morrison, it is proper to conclude from the record that the motivation relied upon comes not from the Ramm reference, but rather, from the Applicant’s description in the specification.

More specifically, it appears the only proffered motivations to combine the Zoeller, Nurse and Morrison references with Ramm and Official Notice as proposed, namely “to give more strength to the main body portion” and “to save in cost of manufacturing” (Paper No. 25, at 5) were both taken not from any of the prior art references or any other objective sources, but rather, erroneously from the Applicant’s specification at page 25, lines 6-18. Again, such impermissible hindsight is an improper basis on which to reject claims. *In re*

Kotzab, 55 USPQ2d 1313, 1318 (Fed. Cir. 2000)(reversing Board's decision affirming obviousness rejection, reasoning:

[W]e cannot say that there is such relevant evidence as a reasonable mind might accept as adequate to support implicitly the conclusion that a skilled artisan confronted with (1) the problem noted by Kotzab... and (2) the two statements in Evans, would have been motivated to control a plurality of valves in a multiple zone setting with only one temperature sensor. In this case, the Examiner and the Board fell into the hindsight trap.)

See also W.L. Gore & Associates v. Garlock, Inc., 220 USPQ 303, 312-13 (Fed. Cir. 1983).

C. The Rejection of Claims 2, 3, 5, 15-18, and 20-23 Must be Reversed

Inasmuch as there has been no objective showing of suggestion or motivation to further combine the Zoeller, Nurse and Morrison references with Ramm in the proposed manner, a *prima facie* case of obviousness has not, and cannot, be established. The only proffered motivations to combine the references are specious or impermissibly culled from the Applicant's disclosure. The rejection of claims 2, 3, 5, 15-18, and 20-23 is therefore improper and should be reversed.

III. Failure to Give Adequate Weight to Objective Evidence of Secondary Considerations of Non-Obviousness Amounts to Improperly Converting Rebuttable Presumption of Obviousness Into Irrebuttable Conclusion of Obviousness

Compounding the erroneous obviousness rejections is the failure to give due consideration to the Applicant's affidavits under 37 CFR § 1.132 submitted December 2, 2002 and August 7, 2003, and the evidence of secondary considerations of non-obviousness contained therein. It is well settled that where evidence of secondary considerations is present, it must always be considered, and given due weight, in connection with an obviousness determination. *See, e.g.*, M.P.E.P. § 716.01(a); *In re De Blauwe et al.*, 222

USPQ 191, 196-97 (Fed. Cir. 1984) (“evidence arising out of secondary considerations must always be considered.”)²

Like in *In re Alton*, 37 USPQ2d 1578, 1583-84 (Fed. Cir. 1996), where the Federal Circuit found error for dismissing a declaration without an adequate explanation of how the declaration failed to overcome a prima facie case, the two affidavits of Theodore Meyers have basically been ignored, without any adequate discussion of how the declarations do not overcome a prima facie case of obviousness. Instead of articulating any reasons why the Meyers affidavits are allegedly insufficient to overcome the obviousness rejections, the final Office Action instead simply reiterated, virtually verbatim, the same unilluminating language from the previous Office Action. *Compare* the text at Paper No. 25, page 7 (“The affidavit [sic.] under 37 CFR 1.132 filed December 2, 2002 and in [sic.] August 7, 2003 is [sic.] insufficient to overcome the current prior art rejection of claims 1-6 and 15-23 as previously set forth.”) to that of Paper No. 21, page 5 (“The affidavit under 37 CFR 1.132 filed December 2, 2002 is insufficient to overcome the current prior art rejection of claims 1-6 and 15-23 as previously set forth.”) As the Board explained in *Ex parte Ohsaka*, 2 USPQ2d 1460 (Bd.Pat.App.&Int. 1987), reverting to an initial conclusion of obviousness, with a conclusory statement that a 1.132 declaration is unconvincing “for the reasons given in support of the [initial] conclusion [of obviousness]” is incorrect: “The flaw with this approach is that the

² See also *In re Sernaker*, 217 USPQ 1, 7 (Fed. Cir. 1983) (“If, however, a patent applicant properly presents evidence relating to these secondary considerations, the board must always consider such evidence in connection with the determination of obviousness.” (citing *In re Fielder and Underwood*, 644, 176 USPQ 300, 303 (CCPA 1973))); *Simmons Fastener Corporation v. Illinois Tool Works, Inc.*, 222 USPQ 744, 746 (Fed. Cir. 1984) (“evidence bearing on issue of nonobviousness ‘is never of “no moment,” is always to be considered and accorded whatever weight it may have.’” (citing *In re Mageli et al.*, 176 USPQ 305, 307 (CCPA 1973)); *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 220 USPQ 303, 314 (Fed. Cir. 1983) (“The objective evidence of nonobviousness . . . should when present always be considered as an integral part of the analysis.”); *Stratoflex, Inc. v. Aeroquip Corp.*, 218 USPQ 871, 879 (Fed. Cir. 1983) (“evidence rising out of the so-called ‘secondary considerations’ must always when present be considered en route to a determination of obviousness.”).

examiner has, in practical effect, converted a rebuttable presumption into a conclusive or irrebuttable presumption of obviousness." 2 USPQ2d at 1462.

Mr. Meyers' affidavits, and the appendices thereto, evidence commercial success and copying by others, which are well-recognized secondary considerations of non-obviousness.

Graham v. John Deere, 383 U.S. 1 (1966). *See also Akzo N.V. v. International Trade Comm'n*, 1 USPQ2d 1241, 1246 (Fed. Cir. 1986)(recognizing commercial success as a strong factor favoring non-obviousness). Copies of Mr. Meyers' affidavits are submitted herewith, as Appendices II and III, respectively.³

The rejections of claims 1, 4, 6, and 19, and of claims 2, 3, 5, 15-18, and 20-23, should be withdrawn for failure to adequately consider Mr. Meyers' affidavits. Had the affidavits properly been considered, they would have been found to overcome any minimum threshold *prima facie* showing of obviousness established in the Office Actions, if indeed such a *prima facie* showing has been established. As claims 1, 4, 6, and 19, and 2, 3, 5, 15-18, and 20-23 would not have been obvious to one of ordinary skill in the art at the time of the invention, those claims are respectfully submitted to be allowable.

CONCLUSION

Because a *prima facie* case of obviousness has not been established as to claims 1, 4, 6, and 19, or as to claims 2, 3, 5, 15-18, and 20-23, the rejections of the pending claims

³ It is respectfully submitted that in the event the Examiner's Answer includes any new arguments concerning, for example, the adequacy of the objective evidence submitted in either or both of Mr. Meyers' affidavits, such late arguments would constitute good and sufficient cause permitting the submission, after final and after appeal, of additional evidence of secondary considerations as may be necessary to rebut those arguments. *See, e.g., In re De Blauwe et al.*, 222 USPQ 191, 197 n. 9 (Fed. Cir. 1984) (vacating affirmed obviousness rejection and remanding, reasoning that where Board or examiner challenges for the first time on appeal the sufficiency of assertions of unexpected results, submitted by an applicant to rebut an obviousness rejection, it is improper not to afford the applicant the opportunity to submit objective evidence of unexpected results). It is noted that ample time existed prior to the final Office Action for the Examiner to have made any arguments concerning the adequacy of the objective evidence submitted in Mr. Meyers' affidavits.

should be reversed. Even if a prima facie case of obviousness had been established, the Applicant sufficiently rebutted the prima facie case with two affidavits under 37 CFR § 1.132. Reversal of the rejections is therefore respectfully solicited.

A Petition for Two-Month Extension of Time and a check for the requisite fees for the extension of time and the filing of this Appeal Brief are submitted herewith. In the event any additional fees are necessary, kindly charge the cost thereof to our Deposit Account No. 13-2855. This Appeal Brief is being submitted in triplicate.

Respectfully submitted,



Jeremy R. Kriegel
Reg. No. 39,257

Attorney for Appellant

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Dated: August 9, 2004

(9) APPENDIX I

Claim 1 (Twice Amended): A tee for use at the inlet or outlet of a septic tank, the tee comprising:

an elongated generally cylindrical main body portion defining a tubular opening, the tubular opening being adapted to receive a filter therein;

a cylindrical uppermost hub coaxial with said elongated main body portion and having an inner diameter greater than said diameter of the elongated main body portion; and

an inlet/outlet port in communication with the tubular opening, the inlet/outlet port having an inlet/outlet hub at an open end thereof, said inlet/outlet hub having a diameter sized so as to receive a pipe of a first outer diameter and being adaptable to receive a pipe of a second outer diameter, said diameter of the inlet/outlet hub being greater than the diameter of the elongated main body portion.

2 (Once Amended): The tee of claim 21, wherein said first and second ribs extend outwardly from an outer wall of the elongated main body portion and said uppermost hub.

3 (Original): The tee of claim 2, further including seams coextending with said first and second ribs.

4 (Twice Amended): The tee of claim 1, wherein said inlet/outlet port includes a sweep portion arcing upwardly from said elongated main body portion toward a ring defined by said inlet/outlet hub, said sweep portion defining an opening in communication with said tubular opening and said inlet/outlet hub.

5 (Three Times Amended): The tee of claim 1, further comprising at least two horizontal reinforcement ribs on an outer wall of the elongated main body portion.

6 (Original): The tee of claim 1, in combination with a reducer bushing securely received in said inlet/outlet port.

15 (Twice Amended): A one-piece sanitary tee baffle comprising:
an elongated generally cylindrical main body portion defining a tubular opening, the tubular opening being adapted to receive a filter therein;
a cylindrical uppermost hub coaxial with said elongated main body portion and having an inner diameter greater than said diameter of the elongated main body portion; an inlet/outlet port in communication with the tubular opening, the inlet/outlet port having an inlet/outlet hub at an open end thereof, said inlet/outlet hub having a diameter sized so as to receive a pipe of a first outer diameter and being adaptable to receive a pipe of a second outer diameter, said diameter of the inlet/outlet hub being greater than the diameter of the elongated main body portion;
a first rib extending generally longitudinally along said elongated main body portion;
a second rib extending generally longitudinally along said elongated main body portion, said generally cylindrical main body portion having a wall thickness between 0.075" and 0.100" over a substantial portion thereof.

16 (Original): The one-piece sanitary tee baffle of claim 15, in combination with an effluent filter received in the tubular opening thereof.

17 (Once Amended): The one-piece sanitary tee baffle of claim 15, in combination with a length of pipe received in said inlet/outlet hub.

18 (Once Amended): The combination of claim 17, further comprising a reducer bushing between said inlet/outlet hub and said length of pipe received therein.

19 (Previously Presented): The tee of claim 4, having a lowermost end and a length extending from a top of the uppermost hub to said lowermost end, said outlet opening of the inlet/outlet port being located along said length nearer to said uppermost hub than to said lowermost end.

20 (Previously Presented): The tee of claim 19, wherein said main body portion houses an effluent filter received in said tubular opening, and said lowermost end extends into a clear zone of a septic tank when the tee is mounted at a septic tank outlet.

21 (Previously Presented): The tee of claim 1, further comprising a first rib extending generally longitudinally along said elongated main body portion; and a second rib extending generally longitudinally along said elongated main body portion.

22 (Previously Presented): The one-piece sanitary tee baffle of claim 15, wherein the wall thickness of the elongated generally cylindrical main body portion is about 0.090".

23 (Once Amended): A tee for use at the inlet or outlet of a septic tank, the tee comprising:
an elongated generally cylindrical main body portion defining a tubular opening, the tubular opening being adapted to receive a filter therein;
a cylindrical uppermost hub coaxial with said elongated main body portion and having an inner diameter greater than a diameter of the elongated main body portion;
an inlet/outlet port in communication with the tubular opening, the inlet/outlet port having an inlet/outlet hub at an open end thereof, said inlet/outlet hub having a diameter sized so as to receive a pipe of a first outer diameter and being adaptable to receive a pipe of a second outer diameter, said diameter of the inlet/outlet hub being greater than the diameter of the elongated main body portion;
an outer wall on said elongated main body portion; and
at least one horizontal reinforcing rib on said outer wall.

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Meyers)
)
)
APPLICATION NO.: 09/652,927) Examiner: Lugo
)
)
FILED: October 31, 2000) Art Unit: 3677
)
)
FOR: TEE BAFFLE FOR USE AT INLET)
 OR OUTLET OF SEPTIC AND)
 OTHER ON-SITE WASTE)
 DISPOSAL SYSTEMS)

AFFIDAVIT OF THEODORE W. MEYERS UNDER 37 C.F.R. §1.132

I, Theodore W. Meyers, hereby swear as follows:

1. I am the founder and President of Tuf-Tite, Inc. ("Tuf-Tite"), the Assignee of United States Patent Application No. 09/652,927, entitled TEE BAFFLE FOR USE AT INLET OR OUTLET OF SEPTIC AND OTHER ON-SITE WASTE DISPOSAL SYSTEMS, and I am also the sole inventor thereof.
2. I have reviewed the Office Actions mailed on November 27, 2001 and July 2, 2002, and the prior art references on which the rejections under 35 U.S.C. § 103(a) are based.
3. The purpose of this Affidavit is to submit evidence of secondary considerations of non-obviousness, including commercial success and copying by others, in order to rebut the obviousness rejections in the Office Action mailed July 2, 2002.
4. I am familiar with the art of design and manufacture of septic tanks and other on-site waste disposal systems, as well as design and manufacture of the various components used in conjunction with such waste disposal systems, including injection-molded plastic components. I am the inventor of thirteen issued United States patents on products in this field.
5. In particular, I am familiar with older and newer versions of commercially-available injection-molded plastic tees utilized at the inlet and/or outlet of septic and other on-site waste

disposal systems to direct the flow of unfiltered and filtered effluent, and with the filter elements sometimes used in conjunction with such tees. I am also familiar with the labor and time involved in the actual field installation of these types of tees.

6. Tuf-Tite is a manufacturer and supplier of various products in the septic tank and other on-site waste disposal equipment field. Tuf-Tite has introduced numerous new products in the septic tank/on-site waste disposal area over the years. Thus, I am familiar with the history, sales growth, and performance of new products in this field. With particular relevance here, soon after introducing the tees made in accordance with the claims of the subject patent application to customers, I immediately recognized a dramatic volume of sales of such tees, and much more than would be expected based on my long experience in this field.

7. Tuf-Tite sells tees made in accordance with the claims of the subject patent application, sold under the trade name "T-BAFFLE," and under Tuf-Tite's product number "TB-4." Attached as Appendix 1 to this Affidavit is a three page sales report entitled "Sales History for TB-4, T-BAFFLE FOR SEPTIC TANK INLET AND OUTLET," which is a true and accurate thirty-six month record of the sales volume for the T-BAFFLE tees sold by Tuf-Tite covering the time period from October, 1999, a date before such sales commenced, through September, 2002 (with the introduction of the T-BAFFLE tees being in May, 2000). During this time period, Tuf-Tite sold a total of 122,527 T-BAFFLE tees, for a total dollar sales of \$359,746.00.

8. Based on my some 20 years of inventive, research, development, sales, manufacturing and marketing experience in the on-site waste disposal system component business, the sales figures shown in Appendix A reflect a substantial commercial success for the T-BAFFLE tees. Further, I consider all the commercial success of Tuf-Tite's T-BAFFLE tees to be attributable to

the claimed features of the subject patent application, as I know of no other reasons that would have caused such a high volume of sales.

9. Further, this commercial success was realized notwithstanding the fact that use of the T-BAFFLE tees is subject to regulatory approval in many states, and with approvals still pending in certain states. I therefore expect the sales of Tuf-Tite's T-BAFFLE tees to continue to improve as Tuf-Tite obtains regulatory approval for use (i.e., permission to use the tees, as opposed to mandatory use) of the tees in certain states where approval is required, such as in Arkansas and Indiana.

10. Among the significant sales described above, between June 19, 2000 and December 20, 2000, a Tuf-Tite competitor, Zabel Environmental Technology, a/k/a Zabel, Inc., ("Zabel"), purchased 14,040 of the "T-BAFFLE" tees from Tuf-Tite, for a total of \$44,928.00. (See Appendix 2, which is a true and accurate report of all T-BAFFLE tees that Tuf-Tite provided to Zabel) Prior to June 19, 2000, it is my understanding that Zabel manufactured no such tee product, and particularly, Zabel did not manufacture any that was a universal tee product (like the Tuf-Tite TB-4 product), which could accept, and thereby be used with, multiple different standard sizes of pipe product, including Schedule 40 pipe and SDR 35 pipe. Notwithstanding the fact that Zabel is a Tuf-Tite competitor, it is my understanding that Zabel bought the Tuf-Tite TB-4 tees for its own resale since there was no other such product on the market, and had not previously been any, and Zabel wished to remain competitive with Tuf-Tite's substantial sales in that product area.

11. On both May 17, 2000 and May 18, 2001, Tuf-Tite sent Zabel a free sample of the T-BAFFLE tee. Tuf-Tite sent Zabel the May 18, 2001 sample in an unsuccessful effort to re-gain Zabel's business with respect to the T-BAFFLE tee, as by then Zabel had stopped buying the

Tuf-Tite TB-4 tees. In fact, as shown in Appendix 2, since December 20, 2000, Zabel has not purchased a single T-BAFFLE tee from Tuf-Tite, despite continuing to purchase numerous other Tuf-Tite products related to septic tanks and other on-site waste systems. (See Appendix 3, which is a collection of true and accurate sales histories reflecting purchases by Zabel of various other Tuf-Tite products prior to and since December 20, 2000)

12. Sometime in the summer of 2001, not long after Zabel stopped purchasing T-BAFFLE tees from Tuf-Tite, Zabel began advertising and selling its own universal tee for septic and other on-site waste disposal systems, under the trade name "Versa-TeeTM". (See Appendix 4, which is a true and accurate copy of an excerpt from Zabel's Summer 2001 industry publication "The Zabel Zone®," including an article entitled "Filter Tee." See also Appendix 5, which is a true and accurate copy of an advertising insert showing the Zabel "Versa-TeeTM" product.)

13. As the Zabel trade name and marketing materials suggest, the "Versa-TeeTM" product is offered as a versatile product that is adapted to accept both Schedule 40 as well as SDR-35 pipe in its inlet/outlet port.

14. Specifically, the marketing material shown in Appendix 4 states: "Our new tee baffle also accepts both thin-wall pipe and Schedule 40 four-inch pipe." The material shown in Appendix 5 states:

Versa-TeeTM

Versatile Design

- outlet accept SDR 35 or SCH 40

15. I have also personally inspected the "Versa-TeeTM" product and from my inspection I can confirm that not only is the product adapted to accept both Schedule 40 and SDR 35 pipe,

but also, the product is made of a thin-walled, generally cylindrical main body portion, i.e. substantially thinner than, on the order of about half the thickness of, Schedule 40 pipe, which is the thickness typically employed in the body portion of conventional tees having hubs sized to receive Schedule 40-sized pipe.

16. According to independent claims 1, 15, and 23 of the subject patent application assigned to Tuf-Tite, the claimed tee is provided with an inlet/outlet port in communication with the tubular opening of the tee, the inlet/outlet port having an inlet/outlet hub at an open end thereof, the inlet/outlet hub having a diameter sized so as to receive a pipe of a first outer diameter and being adaptable to receive a pipe of a second outside diameter, and the diameter of the inlet/outlet hub being greater than the diameter of the elongated main body portion. Claim 15 further claims a wall thickness between 0.075" and 0.100" over a substantial portion of the elongated main body portion of the tee baffle, which is substantially thinner than Schedule 40-sized pipe thickness, the thickness typically employed in the body portion of conventional tees having hubs sized to receive Schedule 40-sized pipe. These claimed features are understood to be why Zabel bought 14,040 of Tuf-Tite's TB-4 tees, and then later came out with the Zabel "Versa-TeeTM," as no other such tee was available in the marketplace (or ever even known to me).

17. As can be readily seen from the advertisement of the Zabel "Versa-TeeTM" product, Zabel's tee is similarly provided with an inlet/outlet port in communication with the tubular opening of the tee, the inlet/outlet port has an inlet/outlet hub at an open end thereof, the inlet/outlet port has a diameter that is sized to receive a pipe of a first outer diameter (i.e., Schedule 40 pipe), the inlet/outlet hub is adapted to also receive a pipe of a second outside diameter (i.e., SDR 35 pipe), and the diameter of the inlet/outlet hub is greater than the diameter

of the main body portion of the tee (as demonstrated by the fact that the portion of the inlet/outlet hub sized to receive SDR 35 pipe, i.e. the smallest diameter of that hub, is the same diameter of the uppermost hub of the tee, which is larger than the diameter of the main body portion of the tee). Furthermore, as I saw in my personal inspection of the Versa-Tee™ product, the generally cylindrical main body portion of the tee has a thin-walled construction, on the order of about half the thickness of Schedule 40-sized pipe. In my experience, one of ordinary skill in this art would not expect to find such a thin wall thickness in a tee, as conventional tees, unlike the tees claimed in the subject patent application for use at the inlet or outlet of septic and other on-site waste systems, are typically used in plumbing situations in which the tees must withstand high pressures, and hence, are formed of much thicker walls than the "T-BAFFLE" product.

18. As the attached sales histories demonstrate, Zabel has not purchased any of the "T-BAFFLE" tees from Tuf-Tite since December 20, 2000, seven months following Tuf-Tite's introduction into the market of the "T-BAFFLE" product.

19. The foregoing is real-world evidence of copying by Zabel. That copying, coupled with the large commercial success realized by Tuf-Tite on its "T-BAFFLE" tees, demonstrates the non-obviousness of the claimed subject matter of the present patent application.

20. The Tuf-Tite T-BAFFLE tees have been certified by the NSF Certification to Standard 46, governing effluent filters and housings.

21. I hereby affirm that all of the foregoing statements are true and accurate to the best of my knowledge and belief, that each of the documents appended hereto are true and accurate

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copies of what they purport to represent, and that I am aware any false statements may subject me to penalties for perjury and may jeopardize the validity of any patent(s) that may issue on the present application.

November 26 2002

Theodore W. Meyers
Theodore W. Meyers
Inventor & President,
Tuf-Tite, Inc.

Subscribed and sworn to before me on this 26th
day of November, 2002

Kelly A. Sheehan
(Notary Public)



| Sales History for TB-4, T-BAFFLE FOR SEPTIC TANK INLET AND OUTLET | |
|---|-------|
| Item | Usage |
| Back | Fwd |

| Pds | Past | End Date | \$ Sales | % Prior | Qty Sls | % Prior | Period ASP |
|--------------------|------|----------|----------|---------|----------|---------|------------|
| 36 | | 10/31/99 | 0 | N/A | 0 | N/A | 0.00 |
| 35 | | 11/30/99 | 0 | 100 | 0 | 100 | 0.00 |
| 34 | | 12/31/99 | 0 | 100 | 0 | 100 | 0.00 |
| 33 | | 01/31/00 | 0 | 100 | 0 | 100 | 0.00 |
| 32 | | 02/29/00 | 0 | 100 | 0 | 100 | 0.00 |
| 31 | | 03/31/00 | 0 | 100 | 0 | 100 | 0.00 |
| 30 | | 04/30/00 | 0 | 100 | 0 | 100 | 0.00 |
| 29 | | 05/31/00 | 4,340 | 100 | 1,185 | 100 | 3.66 |
| 28 | | 06/30/00 | 20,676 | 476 | 7,583 | 639 | 2.73 |
| 27 | | 07/31/00 | 8,696 | 42 | 4,923 | 64 | 1.77 |
| 26 | | 08/31/00 | 9,119 | 104 | 3,096 | 62 | 2.95 |
| 25 | | 09/30/00 | 18,865 | 206 | 5,639 | 182 | 3.35 |
| Totals (36-25) | | | 61,696 | | 22,426 | | 2.75 |
| Avg of Pds (36-25) | | | 5,141.33 | | 1,868.83 | | |

| Sales History for IB-4-T BAFFLE FOR 550 LITRE TANK | | | | | | |
|--|----------|-----------|---------|----------|---------|------------|
| Pds | End Date | \$ Sales | % Prior | Qty Sls | % Prior | Period ASP |
| 24 | 10/31/00 | 4,041 | 21 | 2,602 | 21 | 1.55 |
| 23 | 11/30/00 | 19,951 | 493 | 5,981 | 229 | 3.34 |
| 22 | 12/29/00 | 21,561 | 108 | 6,907 | 115 | 3.12 |
| 21 | 01/31/01 | 10,763 | 49 | 4,145 | 60 | 2.60 |
| 20 | 02/28/01 | 3,199 | 29 | 1,477 | 35 | 2.17 |
| 19 | 03/30/01 | 6,027 | 250 | 2,601 | 176 | 3.09 |
| 18 | 04/30/01 | 8,841 | 110 | 3,025 | 116 | 2.92 |
| 17 | 05/31/01 | 15,113 | 170 | 5,695 | 188 | 2.65 |
| 16 | 06/29/01 | 12,506 | 82 | 3,634 | 63 | 3.44 |
| 15 | 07/31/01 | 11,742 | 93 | 3,895 | 107 | 3.01 |
| 14 | 08/31/01 | 9,008 | 76 | 3,729 | 95 | 2.42 |
| 13 | 09/28/01 | 11,406 | 126 | 3,373 | 90 | 3.38 |
| Totals (24-13) | | 136,158 | | 47,064 | | 2.89 |
| Avg of Pds (24-13) | | 11,346.50 | | 3,922.00 | | |

10 Sales History for IB-411 Baffle for Sep. 10 Tank Metal and Gasket

Item Useage Back 1st Yr 2nd Yr 3rd Yr

| Pds | Past | End Date | \$ Sales | % Sales | % Prior | Qty Sls | % Prior | Period ASP |
|--------------------|------|----------|-----------|---------|---------|----------|---------|------------|
| 2 | | 10/31/01 | 12,460 | 109 | | 3,198 | 109 | 3.90 |
| 11 | | 11/30/01 | 10,321 | 82 | | 3,225 | 100 | 3.20 |
| 10 | | 12/31/01 | 10,920 | 105 | | 3,216 | 99 | 3.40 |
| 9 | | 01/31/02 | 13,428 | 122 | | 4,277 | 132 | 3.14 |
| 8 | | 02/28/02 | 9,270 | 69 | | 3,330 | 77 | 2.78 |
| 7 | | 03/29/02 | 9,970 | 107 | | 2,975 | 89 | 3.35 |
| 6 | | 04/30/02 | 14,465 | 145 | | 4,820 | 162 | 3.00 |
| 5 | | 05/31/02 | 16,747 | 115 | | 5,926 | 122 | 2.83 |
| 4 | | 06/28/02 | 14,104 | 84 | | 4,522 | 76 | 3.12 |
| 3 | | 07/31/02 | 19,657 | 139 | | 6,556 | 144 | 3.00 |
| 2 | | 08/30/02 | 16,132 | 82 | | 5,885 | 89 | 2.74 |
| 1 | | 09/30/02 | 14,418 | 89 | | 5,107 | 86 | 2.82 |
| Totals (12-1) | | | 161,892 | | | 53,037 | | 3.05 |
| Avg. of Pds (12-1) | | | 13,491.00 | | | 4,419.75 | | |

Page: 1
Date: 10/28/02 at 9:04 AM

Tuf-Tite Inc.
Item Sales Analysis Report
Current and History Files
Cust = ZIN1 Item = TB-4

| Cust # | Invoice # | Inv Date | Slpr | U/M | Qty | Ship - Trn | |
|--|-----------|----------|-------|-------|----------|------------|--|
| ===== | ===== | ===== | ===== | ===== | ===== | ===== | |
| ** Item # / Item ==> TB-4 / T-BAFFLE FOR SEPTIC TANK INLET AND | | | | | | | |
| ZIN1 | 66180 | 05/17/00 | AD | EA | 1.000 | | |
| ZIN1 | 67390 | 06/19/00 | AD | EA | 2880.000 | | |
| ZIN1 | 70508 | 09/19/00 | AD | EA | 2520.000 | | |
| ZIN1 | 72240 | 11/03/00 | AD | EA | 2880.000 | | |
| ZIN1 | 73287 | 12/20/00 | AD | EA | 5760.000 | | |
| ZIN1 | 77015 | 05/18/01 | AD | EA | 1.000 | | |
| ----- | | | | | | | |
| | | | | | | 14042.000 | |
| ===== | | | | | | | |
| | | | | | | 14042.000 | |

REDACTED

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Date: 10/28/02 at 9:02 AM

Tuf-Tite Inc.
Item Sales Analysis Report
Current and History Files
Cust = ZIN1 Item = SL-4

| Cust # | Invoice # | Inv Date | Slpr | U/M | Qty Ship - Trn |
|--|-----------|----------|------|-------|----------------|
| ===== | ===== | ===== | ==== | ===== | ===== |
| ** Item # / Item ==> SL-4 / 4" SPEED LEVELER | | | | | |
| ZIN1 | 62157 | 12/16/99 | AD | EA | 100.000 |
| ZIN1 | 67897 | 07/05/00 | AD | EA | 500.000 |
| ZIN1 | 73463 | 01/05/01 | AD | EA | 200.000 |
| ZIN1 | 73805 | 01/24/01 | AD | EA | 500.000 |
| ZIN1 | 76024 | 04/23/01 | AD | EA | 350.000 |
| ZIN1 | 76527 | 05/07/01 | AD | EA | 250.000 |
| ZIN1 | 76880 | 05/15/01 | AD | EA | 250.000 |
| ZIN1 | 77758 | 06/11/01 | AD | EA | 500.000 |
| ZIN1 | 79825 | 08/03/01 | AD | EA | 500.000 |
| ZIN1 | 80435 | 08/20/01 | AD | EA | 500.000 |
| ZIN1 | 82670 | 10/23/01 | AD | EA | 200.000 |
| ZIN1 | 83577 | 11/15/01 | AD | EA | 500.000 |
| ZIN1 | 85681 | 02/14/02 | AD | EA | 1000.000 |
| ZIN1 | 87929 | 04/26/02 | AD | EA | 1000.000 |
| ZIN1 | 90619 | 07/03/02 | AD | EA | 1000.000 |
| ----- | | | | | |
| ** Subtotal ** | | | | | 7350.000 |
| ===== | | | | | ===== |
| *** Total *** | | | | | 7350.000 |

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Page: 1
Date: 10/28/02 at 8:57 AM

Tuf-Tite Inc.
Item Sales Analysis Report
Current and History Files
Cust = ZIN1 Item = 6HD2

| Cust # | Invoice # | Inv Date | Slpr | U/M | Qty Ship - Trn |
|---|-----------|----------|------|-------|----------------|
| ===== | ===== | ===== | ==== | ===== | ===== |
| ** Item # / Item ==> 6HD2 / 6 HOLE DISTRIBUTION BOX | | | | | |
| ZIN1 | 62157 | 12/16/99 | AD | EA | 12.000 |
| ZIN1 | 64678 | 04/05/00 | AD | EA | 48.000 |
| ZIN1 | 73578 | 01/12/01 | AD | EA | 48.000 |
| ZIN1 | 75329 | 04/03/01 | AD | EA | 48.000 |
| ZIN1 | 77563 | 06/05/01 | AD | EA | 24.000 |
| ZIN1 | 78329 | 06/26/01 | AD | EA | 24.000 |
| ZIN1 | 79367 | 07/23/01 | AD | EA | 36.000 |
| ZIN1 | 79825 | 08/03/01 | AD | EA | 48.000 |
| ZIN1 | 82670 | 10/23/01 | AD | EA | 24.000 |
| ZIN1 | 82842 | 10/26/01 | AD | EA | 24.000 |
| ZIN1 | 83602 | 11/15/01 | AD | EA | 48.000 |
| ZIN1 | 83752 | 11/20/01 | AD | EA | 84.000 |
| ZIN1 | 85681 | 02/14/02 | AD | EA | 48.000 |
| ZIN1 | 85741 | 02/15/02 | AD | EA | 48.000 |
| ZIN1 | 88902 | 05/21/02 | AD | EA | 48.000 |
| ZIN1 | 89155 | 05/28/02 | AD | EA | 1.000 |
| ZIN1 | 90619 | 07/03/02 | AD | EA | 100.000 |
| ----- | | | | | |
| ** Subtotal ** | | | | | 713.000 |
| ===== | | | | | 713.000 |

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Page: 1
Date: 10/28/02 at 8:55 AM

Tuf-Tite Inc.
Item Sales Analysis Report
Current and History Files
Cust = ZIN1 Item = 4HD2

| Cust # | Invoice # | Inv Date | Slpr | U/M | Qty | Ship - Trn |
|---|-----------|----------|------|-------|-------|------------|
| ===== | ===== | ===== | ==== | ===== | ===== | ===== |
| ** Item # / Item ==> 4HD2 / 4 HOLE DISTRIBUTION BOX | | | | | | |
| ZIN1 | 62157 | 12/16/99 | AD | EA | | 12.000 |
| ZIN1 | 64678 | 04/05/00 | AD | EA | | 48.000 |
| ZIN1 | 73029 | 12/05/00 | AD | EA | | 48.000 |
| ZIN1 | 73173 | 12/12/00 | AD | EA | | 48.000 |
| ZIN1 | 74357 | 02/26/01 | AD | EA | | 48.000 |
| ZIN1 | 75329 | 04/03/01 | AD | EA | | 48.000 |
| ZIN1 | 77563 | 06/05/01 | AD | EA | | 24.000 |
| ZIN1 | 77758 | 06/11/01 | AD | EA | | 60.000 |
| ZIN1 | 79367 | 07/23/01 | AD | EA | | 48.000 |
| ZIN1 | 79825 | 08/03/01 | AD | EA | | 12.000 |
| ZIN1 | 80888 | 08/31/01 | AD | EA | | 100.000 |
| ZIN1 | 82981 | 10/31/01 | AD | EA | | 9.000 |
| ZIN1 | 83752 | 11/20/01 | AD | EA | | 48.000 |
| ZIN1 | 85681 | 02/14/02 | AD | EA | | 108.000 |
| ZIN1 | 85741 | 02/15/02 | AD | EA | | 108.000 |
| ZIN1 | 90808 | 07/10/02 | AD | EA | | 100.000 |
| ----- | | | | | | 869.000 |
| ===== | | | | | | 869.000 |
| *** Total *** | | | | | | |

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Page: 1
Date: 10/28/02 at 9:00 AM

Tuf-Tite Inc.
Item Sales Analysis Report
Current and History Files
Cust = ZIN1 Item = DB6

| Cust # | Invoice # | Inv Date | Slpr | U/M | Qty Ship - Trn |
|--|-----------|----------|-------|-------|----------------|
| ===== | ===== | ===== | ===== | ===== | ===== |
| ** Item # / Item ==> DB6 / 6" DROP BOX | | | | | |
| ZIN1 | 62157 | 12/16/99 | AD | EA | 12.000 |
| ZIN1 | 64678 | 04/05/00 | AD | EA | 120.000 |
| ZIN1 | 73173 | 12/12/00 | AD | EA | 120.000 |
| ZIN1 | 75046 | 03/23/01 | AD | EA | 48.000 |
| ZIN1 | 77563 | 06/05/01 | AD | EA | 48.000 |
| ZIN1 | 77758 | 06/11/01 | AD | EA | 48.000 |
| ZIN1 | 79825 | 08/03/01 | AD | EA | 48.000 |
| ----- | | | | | |
| ** Subtotal ** | | | | | 444.000 |
| ----- | | | | | 444.000 |
| *** Total *** | | | | | |

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Page: 1

Date: 10/28/02 at 8:58 AM

Tuf-Tile Inc.
Item Sales Analysis Report
Current and History Files
Cust = ZIN1 Item = 7HD2

| Cust # | Invoice # | Inv Date | Slpr | U/M | Qty | Ship - Trn |
|---|-----------|----------|------|-------|---------|------------|
| ===== | ===== | ===== | ==== | ===== | ===== | ===== |
| ** Item # / Item ==> 7HD2 / 7 HOLE DISTRIBUTION BOX | | | | | | |
| ZIN1 | 62157 | 12/16/99 | AD | EA | 5.000 | |
| ZIN1 | 64678 | 04/05/00 | AD | EA | 100.000 | |
| ZIN1 | 83577 | 11/15/01 | AD | EA | 15.000 | |
| ZIN1 | 88197 | 05/02/02 | AD | EA | 15.000 | |
| ZIN1 | 89155 | 05/28/02 | AD | EA | 15.000 | |
| ZIN1 | 91372 | 07/23/02 | AD | EA | 100.000 | |
| ----- | | | | | | |
| ** Subtotal ** | | | | | | 250.000 |
| | | | | | | ===== |
| *** Total *** | | | | | | 250.000 |

REDACTED

THE ZABEL ZONE[®]

THE ONSITE WASTEWATER MAGAZINE

Summer 2001



Protecting our Environment

Filter Tee

By Theo B. Terry, III, RS

Remember the scene from the movie, "Raiders of the Lost Ark", where Indiana Jones encounters the Arab swordsman in the marketplace? Jones has already made several escapes as he runs through the narrow alleyways, but screeches to a halt as the burly Arab comes into view, brandishing his scimitar with a flourish of fancy moves designed to intimidate Jones with his skill. The action stops as Jones watches his opponent's posturing, then resumes as he shrugs, pulls out his pistol, and dispatches his foe with one quick shot.

I love that scene! It reminds me of the posturing a couple of onsite companies have been making over the issue of solids leaving the septic tank when the filter is pulled for cleaning.

One company touts their superior design—the use of a ball as a shutoff device, which stops the flow of effluent from entering the tee from the bottom when the filter is pulled from the septic tank. But the problem is, this design in that situation then allows the scum layer to flow over the top of the tee and out to the drainfield. If the filter cartridge is not replaced, (as we all know is sometimes the case in "the real world"), overflow of the scum layer will continue, leading to premature failure of the drainfield.

Editors note:
Look for the
new Zabel
Filter Tee
coming to a
store near
you later this
summer.



Another company has come up with the concept of two effluent filters locked together. The idea for servicing the filters is that you turn and unlock the two filters, and initially pull only the innermost filter for cleaning. Then you are supposed to lock the two filters back together and pull both of them for cleaning.

Meanwhile, Mr. Pumper, out on a service call, just shrugs his shoulders, rolls his eyes and drops in the hose from the truck to pump the tank.

Because, as we know, until he pumps the tank down to a level below the top of the outlet tee, he doesn't know which filter is in the tank. Most of the extended handles for effluent filters are made with a half-inch PVC tee and pipe. He doesn't know to twist and pull (or is it pull and twist?), he simply knows he needs to service the septic tank. His answer is simply to pump the tank.

What both of these companies have missed is as obvious as the nose on my face. The "problem" (and I say that loosely, since it is of little consequence to begin with), lies not with the filter, but with the tee baffle. The filter has done its job. It is now up to the tee baffle to perform.

At Zabel, we don't look to add bells and whistles to our line of products. Therefore, we've designed a new tee baffle for the onsite industry. The tee is designed specifically for use in a septic tank. It comes with its own built-in filter screen on the outlet side. Each time a Zabel 1801 filter is either removed or inserted into the tee, it sweeps clean that special filter screen. However, the tee also is available in a model without the filter screen, specifically for use on the inlet side of the septic tank. Our new tee baffle also accepts both thin-wall pipe and Schedule 40 four-inch pipe.

Don't be distracted by all the "posturing" and gimmicks out there. Look to Zabel for real solutions to all your onsite wastewater problems, both big and small.

Patent Pending

Warning: Yes this product and the process in which it operates is in the patent process.



NEW *The only Tee you'll ever need.*
VERSATEE™

Versatile Design

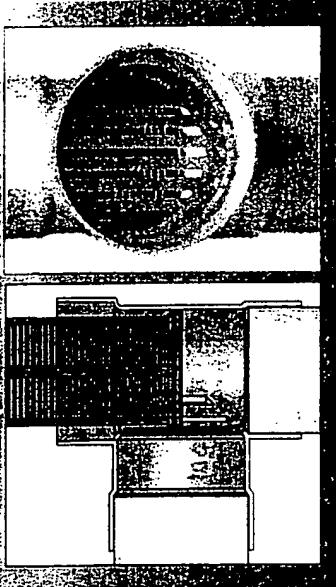
- outlet accept SDR 35 or SCH 40
- May be purchased alone or with your choice of SDR 35 or SCH 40 extension
- Available with or without Filter Slots

1-800-221-5742

Visit our Website www.zabelzone.com

By-Pass Protection

Zabel's new
provides by-pass protection
during effluent filter servicing, or in the event of
accidental filter removal.



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Meyers)
)
APPLICATION NO.: 09/652,927) Examiner: Lugo
)
FILED: October 31, 2000) Art Unit: 3677
)
FOR: TEE BAFFLE FOR USE AT INLET)
 OR OUTLET OF SEPTIC AND)
 OTHER ON-SITE WASTE)
 DISPOSAL SYSTEMS)

SUPPLEMENTAL AFFIDAVIT OF THEODORE W. MEYERS UNDER 37 C.F.R. §1.132

I, Theodore W. Meyers, hereby swear as follows:

1. I am the founder and President of Tuf-Tite, Inc. ("Tuf-Tite"), the Assignee of United States Patent Application No. 09/652,927, entitled TEE BAFFLE FOR USE AT INLET OR OUTLET OF SEPTIC AND OTHER ON-SITE WASTE DISPOSAL SYSTEMS, and I am also the sole inventor thereof.

2. I have reviewed the Office Action mailed on February 7, 2003, and the prior art references on which the rejections under 35 U.S.C. § 103(a) are based.

3. One purpose of this Supplemental Affidavit is to explain the reasons why I believe the prior art patents cited in the rejections set forth in the Office Action are different from my invention as claimed, or that there is no suggestion or motivation to combine the references in the proposed manner, so that it may be further appreciated why those references fail to render the invention as claimed in the pending application obvious. Another purpose of this Supplemental Affidavit is to submit additional consistent evidence of secondary considerations of non-obviousness, including commercial success copying by others, which, in conjunction with the evidence of non-obviousness submitted with my November 26, 2002 Affidavit, rebuts the obviousness rejections in the Office Action mailed February 7, 2003.

4. I, as a person skilled in the art to which my patent application pertains, would not have been motivated to combine the elongated body of the tee in Nurse, U.S. Patent No. 5,580,453, with the tee of Zoeller, U.S. Patent No. 6,136,190, the latter as modified to have an inlet/outlet hub that has a diameter sized so as to receive a pipe of a first outer diameter and being adaptable to receive a pipe of a second outside diameter. After careful review, I find no teaching or suggestion in either Nurse or Zoeller to combine them in the manner proposed. Zoeller shows the use of an expansion piece (30) in order to extend the length of the tee. This is just as described in the background section of my patent application, where it is explained that it is typical for an installer to cut off a relatively short portion of a 10' length of commercially available PVC pipe, for example 12", and use that separate length of pipe as the needed expansion piece, with the remainder of that PVC pipe length now being less usable, and often discarded as waste. The desire to avoid such unnecessary waste is one of the factors that motivated me to conceive of the invention as-claimed in my application. Thus, Zoeller's showing of a separate expansion piece teaches people ordinarily skilled in the art in a direction away from the use of an elongated main body portion.

5. Had it been obvious to provide an elongated main body portion in a tee having a cylindrical uppermost hub having an inner diameter greater than a diameter of the tee's main body portion, and an inlet/outlet port with an inlet hub, then Zoeller, which was filed two and a half years after the Nurse patent issued, would have been expected to teach and use an integral elongated main body portion, instead of continuing to teach the wasteful and cumbersome use of a separate expansion piece to cover a filter received within the tee. But the Zoeller patent does not.

6. With respect, I disagree with the statement in the Office Action that "Morrison teaches that it is known in the art to have a tee adapted to receive a pipe of a first or second outer diameter (by using a reducer as illustrated in Figure 8)." Morrison does not teach the use of a reducer. Rather, in Figure 8, Morrison shows a ring (a⁶) inserted in the hub to operate as a stop for the end of a succeeding tee, i.e. to avoid the presence of a slip joint, sealed by oakum and lead, within a pipe tee. There is no teaching in Morrison of a pipe received inwardly of the ring (a⁶). The vertical lines in the drawing of Figure 8 represent the interior of the ring, not part of a pipe. Since the ring is used as a stop, it would be directly contrary to the purpose of the ring (a⁶) in Morrison to have a pipe received inwardly of the ring (a⁶). A pipe received within the ring (a⁶) would have to be sealed within the ring with some type of caulk, such as the oakum and lead described in the specification of Morrison, thus introducing a slip joint, including caulk, into soil pipe. Yet, this is exactly what Morrison expressly indicates is sought to be avoided by providing the ring (a⁶) in the first place.

7. As to claim 21 of my patent application, and those claims depending therefrom, Ramm does not disclose the use of ribs extending along an elongated main body portion as recited in the claims. For the reasons explained in ¶¶ 4, 5 above, it would not have been obvious to modify the tee of Zoeller to include the elongated body of Nurse. The bases (12) with mating surfaces (14) in Ramm, are areas of weakness of the two-piece pipe fitting shown in Ramm, as opposed to strengthening ribs. Therefore, no motivated combination of Ramm with Zoeller, Nurse, and Morrison would result in the invention as recited in claim 21.

8. As to claim 5 of my patent application, there is no teaching in Ramm, or any of the other references listed in the Office Action, of the use of at least one horizontal reinforcement rib on an outer wall of an elongated main body portion.

9. Turning to what I understand to be the so-called "secondary considerations of non-obviousness," Tuf-Tite continues to sell tees made in accordance with the claims of the subject patent application, which are sold under the trade name "T-BAFFLE," and under Tuf-Tite's product number "TB-4." Attached as Appendix A to this Supplemental Affidavit is a sales report entitled "Sales History for TB-4, T-BAFFLE FOR SEPTIC TANK," which is a true and accurate thirty-six month record of the sales volume for the T-BAFFLE tees sold by Tuf-Tite covering the time period from August 1, 2000 through July 31, 2003. During this time period, Tuf-Tite sold a total of 157,826 T-BAFFLE tees. Only a very small portion of the tees listed in Appendix A, less than 1%, were tees provided as free samples to customers. Thus, the vast majority of such listed quantities, over 99%, represent actual sales of Tuf-Tite TB-4 T-Baffle tees.

10. The sales volume for the twelve month period of August 1, 2000 through July 31, 2001 was 48,697 units, the sales volume for the period of August 1, 2001 through July 31, 2002 was 49,147 units, and Tuf-Tite's strongest twelve month period of sales yet for the T-Baffle was August 1, 2002 through July 31, 2003, specifically 59,982 T-Baffle tee units, including 8,710 in May, 2003, representing the largest single month yet of T-Baffle sales. Only a very small percentage of the units listed in each of these three years, less than 1%, were free samples.

11. Based on my some 20 years of inventive, research, development, sales, manufacturing, trade show, and marketing experience in the on-site waste disposal system component business, during which time I have personally experienced the introduction of products ranging from highly commercially successful to unsuccessful, the sales figures shown in Appendix A reflect a substantial commercial success for the T-BAFFLE tees.

12. Attached as Appendix B is a listing, sorted by quantity, of sales on a state-by-state basis of TB-4 T-BAFFLE tees to various states. This listing is titled "Item Sales by State Code" and is captioned "Part by State" "TB-4".

13. As demonstrated by the listing attached as Appendix B, in many states, such as California, Georgia, Maine, Arizona, Michigan, Ohio, and Missouri, Tuf-Tite realized rapid growth of sales of T-BAFFLE tees in the past twelve month period (under the heading "Qty Mos 1-12"), as compared with sales during each of the preceding periods. Further, the sales in those states continued to grow in each successive twelve month period. At least some of this growth is believed to be attributable to regulatory approvals finally occurring in certain counties or municipalities of such states, before which time precasters and installers of septic tanks and other on-site waste facilities that employ tees and filters were unwilling or unable to use T-BAFFLE tees in their jurisdictions.

14. Attached as Appendix C is a sales history listing, for customer ZIN1, which is Zabel Environmental Technology, a/k/a Zabel, Inc. ("Zabel"). This listing confirms that since the report attached as Appendix 2 to my Affidavit of November 26, 2002, Tuf-Tite still has not sent any T-BAFFLE tees to Zabel since May 18, 2001. As indicated in Appendix 2 to my original Affidavit, that May 18, 2001 shipment to Zabel was a free sample tee provided in an unsuccessful effort to re-gain Zabel's business with respect to the T-BAFFLE tee. Tuf-Tite has not sold any T-BAFFLE tees to Zabel since December 20, 2000. As indicated in Appendix C, Zabel continues to purchase various products from Tuf-Tite other than the T-BAFFLE tee.

15. I hereby affirm that all of the foregoing statements are true and accurate to the best of my knowledge and belief, that each of the documents appended hereto are true and accurate copies of what they purport to represent, and that I am aware any false statements may subject

me to penalties for perjury and may jeopardize the validity of any patent(s) that may issue on the present application.

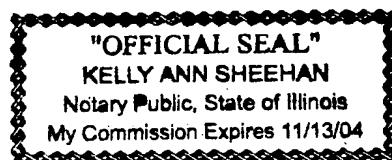
August 6th, 2003

Theodore W. Meyers

Theodore W. Meyers
Inventor & President,
Tuf-Tite, Inc.

Subscribed and sworn to before me on this 6th
day of August, 2003

Kelly Ann Sheehan



Sales History for TB-4, T-BAFFLE FOR SEPTIC TANK

Printed on 08/01/03 at 16:35

| Pds Past | End Date | Qty Sls |
|-----------------|----------------|-----------------|
| 36 | 08/31/00 | 3,096 |
| 35 | 09/30/00 | 5,639 |
| 34 | 10/31/00 | 2,602 |
| 33 | 11/30/00 | 5,981 |
| 32 | 12/29/00 | 6,907 |
| 31 | 01/31/01 | 4,145 |
| 30 | 02/28/01 | 1,477 |
| 29 | 03/30/01 | 2,601 |
| 28 | 04/30/01 | 3,025 |
| 27 | 05/31/01 | 5,695 |
| 26 | 06/29/01 | 3,634 |
| 25 | 07/31/01 | 3,895 |
| REDACTED | | REDACTED |
| Totals | (36-25) | 48,697 |
| Avgs. | (36-25) | 4,058.08 |
| 24 | 08/31/01 | 3,729 |
| 23 | 09/28/01 | 3,373 |
| 22 | 10/31/01 | 3,198 |
| 21 | 11/30/01 | 3,225 |
| 20 | 12/31/01 | 3,216 |
| 19 | 01/31/02 | 4,277 |
| 18 | 02/28/02 | 3,330 |
| 17 | 03/29/02 | 2,975 |
| 16 | 04/30/02 | 4,820 |
| 15 | 05/31/02 | 5,926 |
| 14 | 06/28/02 | 4,522 |
| 13 | 07/31/02 | 6,556 |
| Totals | (24-13) | 49,147 |
| Avgs. | (24-13) | 4,095.58 |
| 12 | 08/30/02 | 5,885 |
| 11 | 09/30/02 | 5,107 |
| 10 | 10/31/02 | 6,357 |
| 9 | 11/30/02 | 3,429 |
| 8 | 12/31/02 | 3,453 |
| 7 | 01/31/03 | 2,939 |
| 6 | 02/28/03 | 3,175 |
| 5 | 03/31/03 | 3,050 |
| 4 | 04/30/03 | 4,847 |
| 3 | 05/30/03 | 8,710 |
| 2 | 06/30/03 | 5,285 |
| 1 | 07/31/03 | 7,745 |
| Totals | (12- 1) | 59,982 |
| Avgs. | (12- 1) | 4,998.50 |

8/1/2003

| Parts - U.S. | | Part by State | | |
|--------------|---------------|---------------|---------------|--------------|
| State | QTY MOS 37-48 | QTY MOS 25-36 | QTY MOS 13-24 | QTY MOS 1-12 |
| TB-4 | | | | |
| CA | 693 | 5,111 | 7,722 | 10,176 |
| NC | 1,958 | 8,203 | 5,542 | 7,192 |
| GA | 139 | 70 | 4,804 | 7,181 |
| NJ | 887 | 4,202 | 4,491 | 4,864 |
| ME | 16 | 17 | 662 | 3,397 |
| AZ | 2 | 779 | 1,680 | 2,709 |
| IN | 518 | 620 | 2,390 | 2,353 |
| CT | 1,555 | 4,141 | 3,122 | 2,276 |
| MI | 288 | 793 | 1,724 | 1,984 |
| NH | 257 | 1,539 | 1,510 | 1,943 |
| NY | 397 | 1,977 | 2,289 | 1,917 |
| OH | 19 | 476 | 1,246 | 1,907 |
| ND | 360 | 759 | 1,292 | 1,488 |
| IA | 334 | 1,421 | 1,895 | 1,384 |
| MO | 18 | 50 | 989 | 1,227 |
| VT | 0 | 812 | 1,577 | 1,145 |
| WV | 106 | 1,321 | 1,322 | 1,142 |
| MN | 3 | 216 | 490 | 669 |
| MT | 32 | 4 | 469 | 639 |
| IL | 108 | 359 | 398 | 566 |
| ID | 17 | 9 | 778 | 495 |
| | 15 | 0 | 1 | 385 |
| MA | 69 | 137 | 58 | 355 |
| VA | 73 | 75 | 130 | 336 |

File Edit Window Help
Item Sales by State Code

| State | Parts - U.S. | | Part by State | |
|-------------|---------------|---------------|---------------|--------------|
| | Qty Mos 37-48 | Qty Mos 25-36 | Qty Mos 13-24 | Qty Mos 1-12 |
| IB-4 | | | | |
| DE | 0 | 1 | 32 | 317 |
| OR | 866 | 2,733 | 196 | 301 |
| KY | 2,885 | 11,211 | 51 | 269 |
| AR | 259 | 87 | 789 | 260 |
| FL | 1,037 | 212 | 516 | 199 |
| WI | 0 | 3 | 10 | 187 |
| PA | 19 | 93 | 268 | 159 |
| TX | 30 | 189 | 168 | 139 |
| LA | 10 | 32 | 56 | 106 |
| RI | 390 | 692 | 81 | 105 |
| WA | 1 | 34 | 163 | 82 |
| NH | 0 | 1 | 1 | 68 |
| CO | 8 | 8 | 16 | 40 |
| AL | 2 | 21 | 61 | 29 |
| OK | 0 | 3 | 15 | 16 |
| WY | 2 | 1 | 1 | 15 |
| NV | 0 | 1 | 9 | 8 |
| SC | 1 | 0 | 6 | 4 |
| TN | 0 | 17 | 1 | 3 |
| UT | 0 | 0 | 21 | 1 |
| NE | 2 | 17 | 6 | 1 |
| KS | 0 | 11 | 4 | 0 |

| Code | Picture | History | Notes | Invoices/Orders | Name/Address | Lookup |
|--------------------------------|---------------|--------------------------|-----------|-----------------|--------------|----------|
| ZABEL ENVIRONMENTAL TECHNOLOGY | | | | | | |
| Item | Last Sale Dt. | Item Description | Mo. 37-48 | Mo. 25-36 | Mo. 13-24 | Mo. 1-12 |
| SL-4 | 07/29/2003 | 4" SPEED LEVELER | 600 | 2,050 | 4,700 | 3,000 |
| DBO6 | 06/12/2003 | 6" DROP BOX-OUTLET DRO | 0 | 0 | 336 | 400 |
| 4HD2 | 07/29/2003 | 4 HOLE DISTRIBUTION BOX | 60 | 324 | 485 | 300 |
| 6HD2 | 06/12/2003 | 6 HOLE DISTRIBUTION BOX | 60 | 180 | 473 | 200 |
| 9HD2 | 08/15/2002 | 9 HOLE DISTRIBUTION BOX | 55 | 0 | 60 | 50 |
| TB-4 | 05/18/2001 | T-BAFFLE FOR SEPTIC TANK | 2,881 | 11,161 | 0 | 0 |

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